

2004 Water Quality Assessment (Final) - Category 5 Listings for WRIA 10

| WRIA | Listing ID | Category | 98 List? | Waterbody Name | Location Information | | | | | Parameter | Remarks | Medium |
|---|------------|----------|----------|----------------|----------------------|-------|-----|-----|----|----------------|--|--------|
| | | | | Basis | | | | | | | | |
| 10 | 16706 | 5 | N | BOISE CREEK | CT48DX | 0 | 20N | 06E | 34 | Fecal Coliform | | Water |
| Hallock (2004), Dept. of Ecology ambient station 10D070 shows 1 of 1 sample (100%) in year 2001 exceeded the percentile criterion. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10D070 (Boise Cr @ Buckley) shows a geometric mean of 68 does not exceed the criterion and that 0% of the samples do not exceed the percentile criterion from 3 samples collected during 2000. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10D070 (Boise Cr @ Buckley) shows a geometric mean of 108 exceeds the criterion and that 44% of the samples exceeds the percentile criterion from 9 samples collected during 2001. | | | | | | | | | | | | |
| Erickson (1999) station BOI00.1 (Boise CreekBOI00.1) shows the geometric mean of 283.93 exceeds the criterion and that 50% of the samples exceeds the percentile criterion from 6 samples collected during 1996. | | | | | | | | | | | | |
| 10 | 35337 | 5 | N | BOISE CREEK | CT48DX | 4.351 | 20N | 07E | 30 | pH | | Water |
| Puyallup Tribe of Indians unpublished data at station BOI-1 (submitted by Char Naylor on 3 March 2003) show 10 excursions beyond the criterion from 49 measurements collected from 1999-2001. | | | | | | | | | | | Low pH | |
| 10 | 7496 | 5 | Y | BOISE CREEK | CZ10IN | 0 | 20N | 07E | 27 | Temperature | | Water |
| Data collected by the Muckleshoot Indian Tribal TFW staff show multiple excursions beyond the criterion (RM 7.0) during 1992. | | | | | | | | | | | Continuous temperature measurements were taken, but results reported as single day maximums. Category 5 listing is continued from 1998 assessment based on multiple excursions from continuous monitoring. | |
| 10 | 7497 | 5 | Y | CLARKS CREEK | AD37IU | 2.428 | 20N | 04E | 30 | Fecal Coliform | | Water |
| Ebbert, et al. 1987. , 1 excursion beyond the criterion (at inflow to Hatchery near Puyallup) on 2/84. | | | | | | | | | | | Fecal coliform data were previously submitted only in hardcopy form. The water segment is listed as Category 5 based on the 1998 assessment. | |
| Ebbert, et al. 1987., 3 excursions beyond the criterion at station 12102075 (at Indian Reservation Boundary at Puyallup) in 8/83, 11/83, and 2/84; | | | | | | | | | | | | |
| KCM (1996) shows the geometric mean criterion is exceeded in 1996 with 2 samples (data summary submitted 2/29/96 by the Puyallup Tribe). | | | | | | | | | | | | |
| Pierce County Conservation District data (submitted by Timothy Barbee on 6/26/97) show 2 excursions beyond the criterion out of 3 samples at station CC7 (mouth) in 1996. | | | | | | | | | | | | |
| Pierce County Conservation District data (submitted by Timothy Barbee on 6/26/97) show 2 excursions beyond the criterion out of 3 samples at station CC5 in 1996. | | | | | | | | | | | | |
| 10 | 7499 | 5 | Y | CLARKS CREEK | AD37IU | 5.396 | 20N | 04E | 32 | pH | | Water |
| Pierce County Conservation District data (submitted by Timothy Barbee on 6/26/97) show 2 excursions beyond the criterion out of 3 samples at station CC1 in 1996. | | | | | | | | | | | Low pH | |

| WRIA | Listing ID | Category | 98 List? | Waterbody Name Basis | Location Information | | | | | Parameter | Remarks | Medium |
|------|------------|----------|----------|---|----------------------|-------|-----|-----|----|----------------|---|--------|
| 10 | 7501 | 5 | Y | CLEAR CREEK Ebbert, et al. 1987. , 2 excursions beyond the criterion (at 31st Avenue) on 11/83 and 2/84. | UP04FV | 0 | 20N | 03E | 11 | Fecal Coliform | | Water |
| | | | | | | | | | | | Fecal coliform data were previously submitted only in hardcopy form. The water segment is listed as Category 5 based on the 1998 assessment. | |
| 10 | 20319 | 5 | N | CLEARWATER RIVER Department of Ecology unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 0.4 show the 7-day mean of daily maximum temperature of 16.11 from measurements collected 7/4 - 9/4, 1996. Puyallup Indian Tribe unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 0.5 show the 7-day mean of daily maximum temperature of 15.29 with the highest daily maximum of 16.46 from measurements collected 7/16 - 9/30, 1995. | YH06OQ | 0 | 19N | 08E | 07 | Temperature | | Water |
| 10 | 20320 | 5 | N | CLEARWATER RIVER Muckleshoot Indian Tribe unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 1.2 show the 7-day mean of daily maximum temperature of 17.04 from measurements collected 7/18 -9/5, 1992. | YH06OQ | 1.776 | 19N | 08E | 17 | Temperature | | Water |
| | | | | | | | | | | | White River Spring Chinook Habitat Guidance: A Water Quality Management Plan (1997) meet the requirements for excluding these segments from the | |
| | | | | Data collected by the Muckleshoot Indian Tribal TFW staff (submitted by Karen Walter on 14 Feb 94) show multiple excursions beyond the criterion (RM 1.2) during 1992. | | | | | | | list under 40 CFR 103.7(b)(1)(iii). (taken from 1998 list database) | |
| 10 | 20321 | 5 | N | CLEARWATER RIVER Department of Ecology unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 2.1 show the 7-day mean of daily maximum temperature of 17.64 from measurements collected 7/4 - 9/4, 1996. Puyallup Indian Tribe unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 2.3 show the 7-day mean of daily maximum temperature of 16.5 from measurements collected 7/7 - 9/30, 1995. | YH06OQ | 3.831 | 19N | 08E | 16 | Temperature | | Water |
| 10 | 20322 | 5 | N | CLEARWATER RIVER Department of Ecology unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 2.7 show the 7-day mean of daily maximum temperature of 17.89 from measurements collected 7/4 - 9/4, 1996. Puyallup Indian Tribe unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 3.15 show the 7-day mean of daily maximum temperature of 14.83 with the highest daily maximum of 16.27 from measurements collected 7/16 - 10/22, 1999. | YH06OQ | 4.423 | 19N | 08E | 21 | Temperature | | Water |
| 10 | 20323 | 5 | N | CLEARWATER RIVER Department of Ecology unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 4.3 show the 7-day mean of daily maximum temperature of 18.1 from measurements collected 7/4 - 9/11, 1996. | YH06OQ | 7.007 | 19N | 08E | 27 | Temperature | | Water |
| 10 | 20324 | 5 | N | CLEARWATER RIVER Puyallup Indian Tribe unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 3.8 show the 7-day mean of daily maximum temperature of 17.04 from measurements collected 7/6 - 9/30, 1995. Puyallup Indian Tribe unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 3.85 show the 7-day mean of daily maximum temperature of 16.5 from measurements collected 7/4 - 9/20, 2001. | YH06OQ | 8.328 | 19N | 08E | 28 | Temperature | | Water |

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|--|------------|----------|----------|--------------------------|----------------------|-----------|--------|---------|----|----------------------------|---|--------|
| 10 | 20325 | 5 | N | CLEARWATER RIVER | YH06OQ | 8.687 | 19N | 08E | 34 | Temperature | | Water |
| Department of Ecology unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 4.9 show the 7-day mean of daily maximum temperature of 16.77 from measurements collected 7/4 - 9/11, 1996. Puyallup Indian Tribe unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.008 at River Mile 5.7 show the 7-day mean of daily maximum temperature of 13.85 with the highest daily maximum of 15.08 from measurements collected 7/16 - 9/30, 1995. | | | | | | | | | | | | |
| 10 | 10175 | 5 | N | COMMENCEMENT BAY | 390KRD | 47122C4J4 | 47.295 | 122.445 | | Dissolved oxygen | | Water |
| Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station CMB003 (Commencement Bay - Browns Point) shows 34 excursions beyond the criteria of 96 samples collected between 1993-2000 | | | | | | | | | | | This listing was reviewed by Ecology Marine Unit staff for natural conditions, with the conclusion that anthropogenic sources appear to contribute to the D.O. exceedances. This listing should be left on Category 5 (Grantham memo, 4/2005) | |
| 10 | 8669 | 5 | Y | COMMENCEMENT BAY (INNER) | GK89AF | 0 | 21N | 03E | 99 | Dieldrin | | Tissue |
| Johnson and Davis, 1996. , excursion beyond the National Toxics Rule criterion calculated for tissue in mussel samples collected in 1995 from Hylebos Waterway at the mouth of Hylebos Creek. | | | | | | | | | | | | |
| 10 | 8671 | 5 | N | COMMENCEMENT BAY (INNER) | GK89AF | 0 | 21N | 03E | 99 | Total PCBs | | Tissue |
| Johnson and Davis, 1996. , excursion beyond the National Toxics Rule criterion calculated for tissue in mussel samples collected in 1995 from Hylebos Waterway at the mouth of Hylebos Creek. | | | | | | | | | | | | |
| 10 | 35738 | 5 | N | COMMENCEMENT BAY (INNER) | 390KRD | 47122C4F3 | 47.255 | 122.435 | | Total PCBs | | Tissue |
| Washington Department of Fish and Wildlife PSAMP database show the National Toxic Rule Criterion was exceeded in a composite of more than 5 muscle tissue tissue tissue tissue tissue tissue samples collected in 1991-1997 from English sole (Pleuronectes vetulus) samples from station COMMBAY. Washington Department of Fish and Wildlife PSAMP database show the National Toxic Rule Criterion was exceeded in a composite of more than 5 muscle tissue tissue tissue tissue tissue samples collected in 1997-1999 from English sole (Pleuronectes vetulus) samples from station COMMBAY. Washington Department of Fish and Wildlife PSAMP database show the National Toxic Rule Criterion was exceeded in single muscle tissue tissue tissue tissue tissue tissue tissue samples collected in 1998-1999 from brown rockfish (Sebastes auriculatus) samples from station COMMBAY. | | | | | | | | | | | | |
| 10 | 35655 | 5 | N | COMMENCEMENT BAY (OUTER) | 390KRD | 47122C4I2 | 47.285 | 122.425 | | Bis(2-ethylhexyl)phthalate | | Tissue |
| Washington Department of Fish and Wildlife PSAMP database show the National Toxic Rule Criterion was exceeded in a composite of more than 5 muscle tissue tissue tissue tissue tissue samples collected in 1993 from English sole (Pleuronectes vetulus) samples from station OUTRCOMM. | | | | | | | | | | | | |

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|------|------------|----------|----------|---|----------------------|-----------|--------|---------|----------------|---|---------|--------|
| 10 | 15710 | 5 | Y | COMMENCEMENT BAY (OUTER) Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station CMB003 (Commencement Bay - Browns Point) shows a geometric mean of 11 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 2 samples collected during 1991.Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station CMB003 (Commencement Bay - Browns Point) shows a geometric mean of 5 does not exceed the criterion and that 11% of the samples does not exceed the percentile criterion from 9 samples collected during 1992, with only 1 sample that exceeds the percentile criterion..Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station CMB003 (Commencement Bay - Browns Point) shows a geometric mean of 5 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 6 samples collected during 1993.Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station CMB003 (Commencement Bay - Browns Point) shows a geometric mean of 8 does not exceed the criterion and that 25% of the samples exceeds the percentile criterion from 8 samples collected during 1994.Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station CMB003 (Commencement Bay - Browns Point) shows a geometric mean of 9 does not exceed the criterion and that 18% of the samples exceeds the percentile criterion from 11 samples collected during 1995.Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station CMB003 (Commencement Bay - Browns Point) shows a geometric mean of 23 exceeds the criterion and that 57% of the samples exceeds the percentile criterion from 7 samples collected during 1996.Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station CMB003 (Commencement Bay - Browns Point) shows a geometric mean of 10 does not exceed the criterion and that 22% of the samples exceeds the percentile criterion from 9 samples collected during 1997.Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station CMB003 (Commencement Bay - Browns Point) shows a geometric mean of 6 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 7 samples collected during 1998.Newton et al. (1998) Dept. of Ecology Ambient Monitoring Station Station CMB003 (Commencement Bay - Browns Point) shows a geometric mean of 16 exceeds the criterion and that 12% of the samples exceeds the percentile criterion from 8 samples collected during 1999. | 390KRD | 47122C4J4 | 47.295 | 122.445 | Fecal Coliform | | Water | |
| 10 | 35739 | 5 | N | COMMENCEMENT BAY (OUTER) Washington Department of Fish and Wildlife PSAMP database show the National Toxic Rule Criterion was exceeded in a composite of more than 5 muscle tissue tissue tissue tissue tissue samples collected in 1993 and 1995 from English sole (Pleuronectes vetulus) samples from station OUTRCOMM. | 390KRD | 47122C4I2 | 47.285 | 122.425 | Total PCBs | | Tissue | |
| 10 | 35740 | 5 | N | DALCO PASSAGE/POVERTY BAY Washington Department of Fish and Wildlife PSAMP database show the National Toxic Rule Criterion was exceeded in a composite of more than 5 muscle tissue tissue tissue tissue tissue samples collected in 1993 and 1995 from English sole (Pleuronectes vetulus) samples from station DASHPNT. | 390KRD | 47122D3D7 | 47.335 | 122.375 | Total PCBs | Water Body Name changed 03/03/04 from Commencement Bay (Inner) to Dalco Passage/Poverty Bay per comment 0044. | Tissue | |
| 10 | 35741 | 5 | N | DALCO PASSAGE/POVERTY BAY Washington Department of Fish and Wildlife PSAMP database show the National Toxic Rule Criterion was exceeded in a composite of more than 5 muscle tissue tissue tissue tissue tissue samples collected in 1996 from quillback rockfish (Sebastes maliger) samples from station LAKOTA. | 390KRD | 47122D3E8 | 47.345 | 122.385 | Total PCBs | | Tissue | |
| 10 | 35743 | 5 | N | DALCO PASSAGE/POVERTY BAY Washington Department of Fish and Wildlife PSAMP database show the National Toxic Rule Criterion was exceeded in a composite of more than 5 muscle tissue tissue tissue tissue tissue samples collected in 1992-1995 from quillback rockfish (Sebastes maliger) samples from station BNSPNT. | 390KRD | 47122D4A5 | 47.305 | 122.455 | Total PCBs | | Tissue | |
| 10 | 8678 | 5 | Y | FIFE DITCH Ebbert, et al. 1987. , 2 excursions beyond the criterion (at 54th Street E.) on 8/12/83 and 4/27/84. | ZV38XK | 0.261 | 20N | 03E | 01 | Ammonia-N | | Water |

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|------|------------|----------|----------|--|----------------------|-------|-----|-----|----|--|--------|
| | | | | Basis | | | | | | Remarks | |
| 10 | 7503 | 5 | Y | FIFE DITCH | ZV38XK | 0.261 | 20N | 03E | 01 | Dissolved oxygen | Water |
| | | | | Ebbert, et al. 1987. , 4 excursions beyond the criterion (at 54th Street E.) on 8/12/83, 11/4/83, 2/20/84, and 4/27/84. | | | | | | During the assessment of data it was determined that WQ Policy 1-11 (updated 9/03) was overly restrictive for the number of years of data excursions needed to list for D.O. impairments . Based on a review of monitoring studies for DO statewide, it was determined that multiple (3 or more) excursions for at least two years of monitoring should be used as an alternative indicator that a waterbody continues | |
| | | | | | | | | | | be impaired. (Braley, ECY/WQP, 2003) | |
| 10 | 7504 | 5 | Y | FIFE DITCH | ZV38XK | 0.261 | 20N | 03E | 01 | Fecal Coliform | Water |
| | | | | Ebbert, et al. 1987. , 3 excursions beyond the criterion (at 54th Street E.) in 8/83, 11/83, and 2/84. | | | | | | Fecal coliform data were previously submitted only in hardcopy form. The water segment is listed as Category 5 based on the 1998 assessment. | |
| 10 | 7505 | 5 | Y | FOX CREEK | PA88SG | 0.84 | 18N | 05E | 28 | Temperature | Water |
| | | | | Data collected by the Muckleshoot Indian Tribe (submitted by Chantal Stevens on 10/31/97) show 26 excursions beyond the criterion out of 60 samples (43%) during 8/97 and 9/97 at Fox Creek RM 0.9. | | | | | | Continuous temperature measurements were taken, but results reported as single day maximums. Category 5 listing is continued from 1998 assessment based on multiple excursions from continuous monitoring. | |
| 10 | 15888 | 5 | Y | HYLEBOS CREEK | RL09XF | 7.574 | 20N | 04E | 05 | Fecal Coliform | Water |
| | | | | Seattle-Metro unpublished data from station B920 (at Milton) show thgeometric mean criterion was exceeded in 1987. | | | | | | | |
| 10 | 15887 | 5 | Y | HYLEBOS CREEK, W.F. | BT61HR | 0.747 | 21N | 04E | 32 | Fecal Coliform | Water |
| | | | | Seattle-Metro unpublished data from station D920 (at South 373rd Street) show the geometric mean criterion was exceeded in 1987. | | | | | | | |
| 10 | 36173 | 5 | N | HYLEBOS WATERWAY | RL09XF | 0 | 21N | 03E | 99 | Chlorinated Pesticides | Tissue |
| | | | | Collier, et al. 1998, show exposure to chlorinated pesticides are asscoaietd with several types of reproductive injury in the English sole. | | | | | | Assigned new WASWIS ID. Was RL09XF. -kk | |
| 10 | 36174 | 5 | N | HYLEBOS WATERWAY | RL09XF | 0 | 21N | 03E | 99 | DDT | Tissue |
| | | | | Collier, et al. 1998, show exposure to DDT are clearly linked to elevated levels of DMA adducts and cytochrome P4501A (CYP1A) activities in liver of English sole and rock sole. | | | | | | Assigned new WASWIS ID. Was RL09XF. -kk | |
| 10 | 36176 | 5 | N | HYLEBOS WATERWAY | RL09XF | 0 | 21N | 03E | 99 | PAHs | Tissue |
| | | | | Collier, et al. 1998, show exposure to PAHs are clearly linked to elevated levels of DNA adducts and cytochrome P4501A (CYP1A) activities in liver of English sole and rock sole, as well as several types of reproductive injury. | | | | | | Assigned new WASWIS ID. Was RL09XF. -kk | |

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|------|------------|----------|----------|---|----------------------|-------|-----|-----|-----------|----------------|---|
| 10 | 36178 | 5 | N | HYLEBOS WATERWAY Collier, et al. 1998, show exposure to PCBs are clearly linked to elevated levels of DMA adducts and cytochrome P4501A (CYP1A) activities in liver of English sole and rock sole. | RL09XF | 0 | 21N | 03E | 99 | Total PCBs | Tissue |
| 10 | 7506 | 5 | Y | KINGS CREEK Data collected by the Muckleshoot Indian Tribe (submitted by Chantal Stevens on 10/31/97) show 8 excursions beyond the criterion out of 60 samples (15%) during 8/97 and 9/97 at Kings Creek RM 1.2. | XK66ZF | 0.72 | 18N | 05E | 34 | Temperature | Water Continuous temperature measurements were taken, but results reported as single day maximums. Category 5 listing is continued from 1998 assessment based on multiple excursions from continuous monitoring. |
| 10 | 20338 | 5 | N | LYLE CREEK Department of Ecology unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.0088 at River Mile 0.1 show the 7-day mean of daily maximum temperature of 16.03 from measurements collected 7/4 - 9/11, 1996. Muckleshoot Indian Tribe unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.0088 at River Mile 0.1 show the 7-day mean of daily maximum temperature of 12.33 with the highest daily maximum of 13 from measurements collected 8/10 - 10/27, 1995. | XX02MC | 0 | 19N | 08E | 27 | Temperature | Water |
| 10 | 7508 | 5 | Y | MEEKER DITCH Pierce County Conservation District data (submitted by Timothy Barbee on 6/26/97) show numerous high fecal coliform values with 5 samples in 1996 at multiple stations on this segment. | WC64LH | 1.304 | 20N | 04E | 33 | Fecal Coliform | Water Fecal coliform data were previously submitted only in hardcopy form. The water segment is listed as Category 5 based on the 1998 assessment. |
| 10 | 7511 | 5 | Y | MEEKER DITCH Pierce County Conservation District data (submitted by Timothy Barbee on 6/26/97) show 5 excursions beyond the criterion out of 5 sampling dates in 1996 at multiple stations on this segment. | WC64LH | 1.304 | 20N | 04E | 33 | pH | Water Low pH |
| 10 | 20339 | 5 | N | MILKY CREEK Department of Ecology unpublished data (submitted by Joanne Schuett-Hames, SWRO, on 13 December 2002) collected from WDFW Segment Number 10.0089 at River Mile <0.1 show the 7-day mean of daily maximum temperature of 20.95 from measurements collected 7/4 - 9/11, 1996. | IG62SF | 0 | 19N | 08E | 34 | Temperature | Water |
| 10 | 7498 | 5 | Y | PUYALLUP RIVER Hallock (2004), Dept. of Ecology ambient station 10A050 shows 1 of 4 samples (25%) in year 2001 exceeded the percentile criterion. Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A050 (Puyallup R @ Puyallup (USGS)) shows a geometric mean of 42 does not exceed the criterion and that 10% of the samples does not exceed the percentile criterion from 10 samples collected during 2001. Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A050 (Puyallup R @ Puyallup (USGS)) shows a geometric mean of 115 exceeds the criterion and that 0% of the samples does not exceed the percentile criterion from 3 samples collected during 2000. Ebbert, et al. 1987., 3 excursions beyond the criterion at station 12102100 (At River Road) in 8/83, 11/83, and 2/84; | PX29AG | 7.735 | 20N | 04E | 18 | Fecal Coliform | Water Fecal coliform data were previously submitted only in hardcopy form. The water segment is listed as Category 5 based on the 1998 assessment. |

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|---|------------|----------|----------|-------------------------|----------------------|---------------|------------|------------|-----------|-----------------------|---------|--------------|
| 10 | 16712 | 5 | Y | PUYALLUP RIVER | PX29AG | 13.147 | 20N | 04E | 22 | Fecal Coliform | | Water |
| Hallock (2004), Dept. of Ecology ambient station 10A070 shows 1 of 4 samples (25%) in year 2001 exceeded the percentile criterion and 1 of 12 samples (8.3%) in year 2003 exceeded the percentile criterion. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A070 (AT BRIDGE ON MERIDIAN JUST N. OF PUYALLU) shows a geometric mean of 35 does not exceed the criterion and that 10% of the samples does not exceed the percentile criterion from 10 samples collected during 2001. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A070 (AT BRIDGE ON MERIDIAN JUST N. OF PUYALLU) shows a geometric mean of 50 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 12 samples collected during 2000. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A070 (AT BRIDGE ON MERIDIAN JUST N. OF PUYALLU) shows a geometric mean of 35 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 13 samples collected during 1999. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A070 (AT BRIDGE ON MERIDIAN JUST N. OF PUYALLU) shows a geometric mean of 60 does not exceed the criterion and that 17% of the samples exceeds the percentile criterion from 12 samples collected during 1998. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A070 (AT BRIDGE ON MERIDIAN JUST N. OF PUYALLU) shows a geometric mean of 171 exceeds the criterion and that 45% of the samples exceeds the percentile criterion from 11 samples collected during 1997. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A070 (AT BRIDGE ON MERIDIAN JUST N. OF PUYALLU) shows a geometric mean of 92 does not exceed the criterion and that 17% of the samples exceeds the percentile criterion from 6 samples collected during 1996. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A070 (AT BRIDGE ON MERIDIAN JUST N. OF PUYALLU) shows a geometric mean of 129 exceeds the criterion and that 10% of the samples does not exceed the percentile criterion from 10 samples collected during 1995. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A070 (AT BRIDGE ON MERIDIAN JUST N. OF PUYALLU) shows a geometric mean of 123 exceeds the criterion and that 25% of the samples exceeds the percentile criterion from 12 samples collected during 1994. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10A070 (AT BRIDGE ON MERIDIAN JUST N. OF PUYALLU) shows a geometric mean of 138 exceeds the criterion and that 42% of the samples exceeds the percentile criterion from 12 samples collected during 1993. | | | | | | | | | | | | |
| 10 | 35421 | 5 | N | PUYALLUP RIVER | PX29AG | 7.735 | 20N | 04E | 18 | Mercury | | Water |
| Hallock (2004), Dept. of Ecology ambient station 10A050 shows 1 sample in year 2003 exceeded the chronic criterion. | | | | | | | | | | | | |
| Puyallup Tribe of Indians unpublished data (submitted by Char Naylor on 3 March 2003) show 1 excursion beyond the chronic criterion from 3 samples collected in 2002 at RM 5.8. | | | | | | | | | | | | |
| Changed from Category 2 to Category 5 on 01/24/05 due to consolidation with Listing ID 42777 (cat 2). -kk | | | | | | | | | | | | |
| 10 | 6877 | 5 | Y | SCATTER CREEK | EW02LH | 0.476 | 19N | 07E | 02 | Temperature | | Water |
| Data collected by the Muckleshoot Indian Tribal TFW staff (submitted by Karen Walter on 14 Feb 94) show multiple excursions beyond the criterion along the reach between RM 0 and RM 2.5 (use mouth segment for listing) 7/22/91 and 8/9/91. | | | | | | | | | | | | |
| WASWIS and Lower Route address redefined on 02/17/05. Changed from LY34GL 51.365 to EW02LH 0.476. -kk | | | | | | | | | | | | |
| Continuous temperature measurements were taken, but data were previously submitted in software that does not provide for analysis of the data. The water segment is listed as Category 5 based on the 1998 assessment. | | | | | | | | | | | | |

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|------|------------|----------|----------|--|----------------------|--------|-----|-----|----|------------------|--|--------|
| 10 | 7513 | 5 | Y | SUMMIT LAKE Eilers et al, 1996 , Documented sensitivity to acid rain loading. pH has steadily declined from 5.92 in 1985 to 5.30 in 1995 and 1996 | 588ANI | 18N | 08E | 17 | | pH | Low pH | Water |
| 10 | 7514 | 5 | Y | SWAN CREEK Ebbert, et al. 1987. , 2 excursions beyond the criterion at station12102212 (at Pioneer Way) on 11/83 and 2/84, . Ebbert, et al. 1987. , 3 excursions beyond the criterion at station 12102202 (at Pioneer Way) on 11/83, 2/84 and 4/84. | YA22IG | 0 | 20N | 03E | 11 | Fecal Coliform | Fecal coliform data were previously submitted only in hardcopy form. The water segment is listed as Category 5 based on the 1998 assessment. | Water |
| 10 | 9864 | 5 | Y | UNNAMED CREEK Roberts (2001) station T1 (UNNAMED TRIBUTARY ID 14309) shows the geometric mean of 237.410032134727 exceeds the criterion and that 60 % of the samples exceeds the percentile criterion from 10 samples collected during 2001. Roberts (2001) station T1ID (UNNAMED TRIBUTARY) shows the geometric mean of 593.863376318066 exceeds the criterion and that 100 % of the samples exceeds the percentile criterion from 3 samples collected during 2001.; | BV68DG | 0 | 19N | 05E | 13 | Fecal Coliform | | Water |
| 10 | 7518 | 5 | Y | WAPATO CREEK Ebbert, et al. 1987. 4 excursions beyond the criterion at station 12102490 (at Union Pacific RR near North Puyallup) on 8/11/83, 11/04/83, 2/13/84, and 4/25/84. | ZV38XK | 12.816 | 20N | 04E | 16 | Dissolved oxygen | During the assessment of data it was determined that WQ Policy 1-11 (updated 9/03) was overly restrictive for the number of years of data excursions needed to list for D.O. impairments . Based on a review of monitoring studies for DO statewide, it was determined that multiple (3 or more) excursions for at least two years of monitoring should be used as an alternative indicator that a waterbody continues to be impaired. (Braley, ECY/WQP, 2003) | Water |
| 10 | 7519 | 5 | Y | WAPATO CREEK Ebbert, et al. 1987. 4 excursions beyond the criterion at station 12102510 (at 12th Street E. in Fife) on 8/11/83, 11/04/83, 2/13/84, and 4/25/84. | MM40DB | 0 | 20N | 03E | 01 | Dissolved oxygen | During the assessment of data it was determined that WQ Policy 1-11 (updated 9/03) was overly restrictive for the number of years of data excursions needed to list for D.O. impairments . Based on a review of monitoring studies for DO statewide, it was determined that multiple (3 or more) excursions for at least two years of monitoring should be used as an alternative indicator that a waterbody continues to be impaired. (Braley, ECY/WQP, 2003) | Water |
| 10 | 7517 | 5 | Y | WAPATO CREEK Ebbert, et al. 1987. 2 excursions beyond the criterion at station 12102490 (at Union Pacific RR near North Puyallup) on 2/13/84 and 4/25/84. | ZV38XK | 12.816 | 20N | 04E | 16 | Fecal Coliform | Fecal coliform data were previously submitted only in hardcopy form. The water segment is listed as Category 5 based on the 1998 assessment. | Water |

| WRIA | Listing ID | Category | 98 List? | Waterbody Name Basis | Location Information | | | | | Parameter | Remarks | Medium |
|------|------------|----------|----------|---|----------------------|--------|-----|-----|----|----------------|--|--------|
| 10 | 7520 | 5 | Y | WAPATO CREEK Ebbert, et al. 1987. 4 excursions beyond the criterion at 12102510 (at 12th Street E. in Fife) on 8/11/83, 11/4/83, 2/13/84, and 4/25/84. | MM40DB | 0 | 20N | 03E | 01 | Fecal Coliform | | Water |
| 10 | 7525 | 5 | Y | WHITE (STUCK) RIVER Pelletier, 1993, 3 excursions beyond the criterion out of 3 samples at RM 6.3 on 9/18/90, 9/19/90, and 10/3/90. | LY34GL | 9.004 | 21N | 04E | 36 | pH | High pH | Water |
| 10 | 16708 | 5 | Y | WHITE RIVER Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C130 (White R. at Buckley) shows a geometric mean of 103 exceeds the criterion and that 33% of the samples exceeds the percentile criterion from 9 samples collected during 1993. Erickson (1999) station WHI23.1 (White River (WHI23.1)) shows the geometric mean of 41.19 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 6 samples collected during 1996. | LY34GL | 34.921 | 20N | 06E | 34 | Fecal Coliform | Was listed under the name White (Stuck) River in 1998. -kk | Water |
| 10 | 16709 | 5 | Y | WHITE RIVER Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C070 (White R. at Sumner) shows a geometric mean of 98 does not exceed the criterion and that 33% of the samples exceeds the percentile criterion from 3 samples collected during 1996. Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C070 (White R. at Sumner) shows a geometric mean of 106 exceeds the criterion and that 33% of the samples exceeds the percentile criterion from 3 samples collected during 1995. Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C070 (White R. at Sumner) shows a geometric mean of 152 exceeds the criterion and that 33% of the samples exceeds the percentile criterion from 9 samples collected during 1993. | LY34GL | 0.505 | 20N | 04E | 49 | Fecal Coliform | Was listed under the name White (Stuck) River in 1998. -kk | Water |
| 10 | 16711 | 5 | N | WHITE RIVER Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C095 (White River @ R Street) shows a geometric mean of 12 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 9 samples collected during 2001. Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C095 (White River @ R Street) shows a geometric mean of 6 does not exceed the criterion and that 8% of the samples does not exceed the percentile criterion from 12 samples collected during 2000. Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C095 (White River @ R Street) shows a geometric mean of 18 does not exceed the criterion and that 13% of the samples exceeds the percentile criterion from 15 samples collected during 1999. Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C095 (White River @ R Street) shows a geometric mean of 14 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 3 samples collected during 1998. Erickson (1999) station WHI08.0 (White River (WHI08.0)) shows the geometric mean of 12.32 does not exceed the criterion and that 0% of the samples does not exceed the percentile criterion from 8 samples collected during 1996. | LY34GL | 12.45 | 21N | 05E | 29 | Fecal Coliform | | Water |

| WRIA | Listing ID | Category | 98 List? | Waterbody Name Basis | Location Information | | | | | Parameter | Remarks | Medium |
|------|------------|----------|----------|---|----------------------|--------------|------------|------------|-----------|--------------------|--|--------------|
| 10 | 7524 | 5 | Y | WHITE RIVER | LY34GL | 12.45 | 21N | 05E | 29 | pH | | Water |
| | | | | Hallock (2004), Dept. of Ecology ambient station 10C095 shows that 2 of 31 samples exceed the criterion. | | | | | | | Changed from Category 5 to Category 2 on 01/24/05 due to consolidation with Listing IDs 10856 (cat 2) and 42704 (cat 2). | |
| | | | | Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C095 (White River @ R Street) shows 2 excursions beyond the criterion out of 12 samples collected between 1993 - 2001. | | | | | | | -kk | |
| | | | | Erickson (1999) station WHI08.0 (White River (WHI08.0)) shows 3 excursions beyond the criterion out of 20 samples collected between 06/96 - 11/97. | | | | | | | Name changed from WHITE (STUCK) RIVER to WHITE RIVER 01/24/05. -kk | |
| 10 | 7526 | 5 | Y | WHITE RIVER | LY34GL | 6.487 | 20N | 04E | 01 | pH | | Water |
| | | | | Pelletier, 1993, 4 excursions beyond the criterion out of 7 samples from RM 8.0 on 9/18/90, 9/19/90, 10/2/90 and 10/3/90. | | | | | | | High pH | |
| | | | | Ebbert, 2002, shows 15 excursions beyond the criterion from 55 daily maximum measurements collected in 2001. | | | | | | | High pH | |
| | | | | Unpublished data from the Puyallup TMDL Effectiveness Monitoring Project shows 32 excursions beyond the criterion from 70 daily maximum measurements collected in 2001. | | | | | | | | |
| 10 | 17513 | 5 | N | WHITE RIVER | LY34GL | 2.468 | 20N | 04E | 42 | Temperature | | Water |
| | | | | Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C085 (White R nr Sumner) shows 0 excursions beyond the criterion out of 5 samples collected between 1993 - 2001. | | | | | | | | |
| | | | | Erickson (1999) station WHI04.9 (White River (WHI04.9)) shows 3 excursions beyond the criterion out of 21 samples collected between 06/96 - 11/97. | | | | | | | | |
| | | | | Pelletier, 1993, 4 excursions beyond the criterion out of 10 samples at RM 4.9 on 9/18/90, 9/19/90, 10/2/90 and 10/3/90. | | | | | | | | |
| 10 | 17515 | 5 | N | WHITE RIVER | LY34GL | 6.487 | 20N | 04E | 01 | Temperature | | Water |
| | | | | Unpublished data from the Puyallup TMDL Effectiveness Monitoring Project shows a 7-day mean of maximum values of 18.9 for week ending 1 September 2002. | | | | | | | | |
| | | | | Dept. of Ecology unpublished data from ambient monitoring station 10C085 (White R. nr Sumner) shows a 7-day mean of daily maximum values of 21.3 for mid-week 21 July 2002 | | | | | | | | |
| | | | | Ebbert, 2002. shows a 7-day mean of maximum values of 18.95 for week ending 31 August 2001. | | | | | | | | |
| 10 | 17515 | 5 | N | WHITE RIVER | LY34GL | 6.487 | 20N | 04E | 01 | Temperature | | Water |
| | | | | Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C085 (White R nr Sumner) shows 1 excursions beyond the criterion out of 5 samples collected between 1993 - 2001 measured on this date: 96/07/24. | | | | | | | | |
| | | | | Erickson (1999) station WHI04.9 (White River (WHI04.9)) shows 3 excursions beyond the criterion out of 6 samples collected between 06/96 - 11/97. | | | | | | | | |
| | | | | Erickson (1999) shows multiple excursions beyond the criterion (RM 4.9) during 1996. | | | | | | | | |

| WRIA | Listing ID | Category | 98 List? | Waterbody Name Basis | Location Information | | | | | Parameter | Remarks | Medium |
|---|------------|----------|----------|-------------------------|----------------------|-------|-----|-----|----|-------------|---------|--------|
| 10 | 17517 | 5 | N | WHITE RIVER | LY34GL | 12.45 | 21N | 05E | 29 | Temperature | | Water |
| Dept. of Ecology unpublished data from ambient monitoring station 10C095 (White R. @ R Street) shows a 7-day mean of daily maximum values of 20.9 for mid-week 21 July 2002 | | | | | | | | | | | | |
| Erickson (1999) station WHI08.0 (White River (WHI08.0)) shows 2 excursions beyond the criterion out of 6 samples collected between 06/96 - 11/97. | | | | | | | | | | | | |
| Erickson (1999) station WHI04.9 (White River (WHI04.9)) shows 3 excursions beyond the criterion out of 6 samples collected between 06/96 - 11/97. | | | | | | | | | | | | |
| Hallock (2001) Dept. of Ecology Ambient Monitoring Station 10C095 (White River @ R Street) shows 0 excursions beyond the criterion out of 12 samples collected between 1993 - 2001 | | | | | | | | | | | | |
| 10 | 21301 | 5 | N | WHITE RIVER | LY34GL | 3.586 | 20N | 04E | 13 | Temperature | | Water |
| Continuous monitoring data from a study by Parametrix (2002 and 2004) indicates exceedances of the numeric temperature criteria at RM 1.8 in 2002 and 2003. | | | | | | | | | | | | |
| Northwest Pulp and Paper Association presented rationale | | | | | | | | | | | | |
| a two year study performed by Parametrix (12/16/02 and 3/15/04) that temperatures higher than the numeric criteria | | | | | | | | | | | | |
| a natural condition and the segment meets the state water quality standard for temperature. Ecology required pulp mills on the Columbia and White/Stuck River to perform a two- | | | | | | | | | | | | |
| ambient water temperature monitoring study in accordance with Ecologys WQP 1-11 and quality assurance | | | | | | | | | | | | |
| Ecology reviewed this study and the associated listing in 2003 for natural conditions, but has not yet made a determination of natural conditions for these rivers. EPA has the lead in a Temperature TMDL for the Columbia and | | | | | | | | | | | | |
| Rivers that is underway that may address this issue. The Parametrix study measured temperature data upstream and downstream of pulp mills along the rivers and found the mills did not have a measurable effect on temperatures (the associated discharges do not exceed 0.3 degrees). This | | | | | | | | | | | | |
| will be valuable for verifying that pulp mills do not contribute a significant increase in temperature when load allocations | | | | | | | | | | | | |
| being considered in the TMDL. | | | | | | | | | | | | |
| 10 | 21302 | 5 | N | WHITE RIVER | LY34GL | 0.221 | 20N | 04E | 23 | Temperature | | Water |
| Parametrix, 2002. shows a 7-day mean of daily maximum value of 18.09 deg. C at RM 0.3 in 2002. | | | | | | | | | | | | |
| Parametrix, 2002. by comparison with upstream station | | | | | | | | | | | | |
| the segment did not exceed the allowable 0.3 deg C rise in water temperature from the Sonoco Products discharge at Sumner when upstream temperature was greater that 18 | | | | | | | | | | | | |

deg

C.